

HUNGARY

PINTER, Jozsef, M.D., CSATA, Sándor, M.D., FRANG, Dezso, M.D.,
RENYI-VAMOS, Ferenc, M.D., TOTI, Jozsef, M.D., and TOTI, Mihaly, M.D.,
of the Urological Clinic at the Medical University (Orvostudományi
Egység) in Budapest.

"Acute Anuria Cases of Various Origins"

Budapest, Orvosi Hetilap, Vol 104, No 20, 19 May 1963, pp. 918-920.

Abstract: Two hundred cases of acute anuria were treated at the authors' clinic since Feb 1960; 148 patients of these were handled in the artificial kidney department. Cases caused by operative shock had a high mortality rate (11 out of 14); so did the cases caused by accidents. The cure rate of cases originating from complications following transfusion, sepsis, poisoning, was high. All patients suffering from anuria caused by eclampsia following pregnancy died since dialysis treatments were ineffective. Twenty three references, including 7 German, 5 Hungarian, and 11 Western.

1/1

CSATA, Sandor, dr.; FRANG, Dezso, dr.; PINTER, Jozsef, dr.

Significance of urological examination in the diagnosis of acute renal failure. Orv. hetil. 105 no.6:258-259 9 F'64.

1. Budapesti orvostudományi Egyetem, Urológiai Klinika.

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CSATA, Sandor, dr.; PINTER, Jozsef, dr.; TOTH, Mihaly, dr.; FRANG, Dezso, dr.

Acute renal failure caused by complications following blood
transfusion. Orv. hetil 105 no.9:409-411 1 Mr'64.

1. Budapesti Orvostudományi Egyetem, Urológiai Klinika.

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ROSDY, Erno, dr.; FRANG, Dezso, dr.; CSONTAI, Agoston, dr.

Significance of intratracheal anaesthesia in urology. Magyar. sebész. 17 no.3:183-185 Je'64.

Anaesthesia in instrumental interventions in the urinary bladder. Ibid.:189-192 .

1. Budapesti Orvostudományi Egyetem Urológiai Klinika (Irásgato: Babics, Antal, dr.; egy. tanár, akadémikus) közleménye.

ZADOR, Laszlo, dr.; FRANG, Dezso, dr.

Problems of urogenital tuberculosis in old age. Orv. hetil.
105 no.24:1111-1114 14 Je'64

1. Budapesti Orvostudományi Egyetem, Urológiai Klinika.

CSATA, S.; PINTER, J.; TOTH, M.; FRANG, D.

Concerning acute renal insufficiency conditioned by transfusion episodes. Acta Chir. Acad. Sci. Hung. 5 no.1:71-77 '64.

1. Urologische Klinik (Direktor: Prof. Dr. A. Babics) der Medizinischen Universität, Budapest.

MAGASI, P.; FRANG, D.; BABICS, A., prof. dr.

Surgical treatment of diseases associated with adrenal hypertrophy. Acta chir. acad. sci. Hung. 5 no.4:359-372 '64.

1. Urologische Klinik (Direktor: Prof. Dr. A. Babics) der Medizinischen Universität, Budapest.

BALOGH, Imre, dr.; FRANG, Dezsó, dr.; TOTH, Mihály, dr.

Advances in the surgical treatment of patients with
coralliform kidney calculi. Orv. hetil. 105 no. 46:2175-
2179 15 N '64.

1. Budapesti Orvostudományi Egyetem, Urológiai Klinika és
Pécsi Orvostudományi Egyetem, Urológiai Klinika.

BABIC, Antal, dr.; CSATA, Sandor, dr.; FRANG, Dezso, dr.; VILK,
Mihaly, dr.

Bilateral retrograde pyelography causing acute renal failure.
Orv. hetil. 106 no.12:543-547 21 Mr '65

1. Budapesti Orvostudományi Egyetem, Urológiai Klinika
(igazgató: Babics, Antal, dr.).

FRANG, DEZSO, dr.; RUSZINKO, Barnabas, dr.

Ureteral valve causing total obstruction. Orv hetil. 106 no.28:
1323-1324 11 J1'65.

1. Budapesti Orvostudományi Egyetem, Urológiai Klinika (igaz-
gato: Babics, Antal, dr.).

CSATA, Sándor, dr.; FRANG, Dezső, dr.; TOTH, Mihály, dr.

Acute renal failure caused by hemorrhagic pancreatitis. Orv. hetil.
106 no.3231519-1520 8 Ag'65.

1. Budapesti Orvostudományi Egyetem, Urológiai Klinika (igazgató:
Babics, Antal, dr.).

CSATA, S.; FRANG, D.; TOTH, M.; CSELLAR, M.

On the association of pancreatic lesion and acute renal failure.
Acta chir. acad. sci. Hung. 6 no.4:407-411 '65.

1. Urologische Klinik (Direktor: Prof. Dr. A. Babics) der Medizinischen Universität Budapest. Submitted December 28, 1964.

INTERNAL MEDICINE

HUNGARY

FRANG, Dezsó, Dr., CSATA, Sandor, Dr., HAMVASI, György, Dr., and TOTH, Mihály, Dr., Urological Clinic at the Medical University (Orvostudományi Egyetem, Urologiai Klinika) in Budapest (Director: BABICS, Antal, Dr.).

"Acute Kidney Insufficiency Caused by Mercury Compounds"

Budapest, Orvosi Hetilap, Vol 107, No 24, 12 Jun 1966, pp 1118-1120.

Abstract: In order to demonstrate the effect of mercury compounds on the development of kidney insufficiency in an acute manner, the authors describe their experiences in this field. This involves 14 cases at the Artificial-Kidney Department (Művese Osztály) of the Urological Clinic. These cases were discussed and the respective clinical and pathological factors were described. The prognosis of acute kidney insufficiency caused by mercury compounds appears to be brighter today than has been before. 16 references, including 10 Hungarian, 1 German, and 5 Western.

1/1

FRANGER, J.

CZBCH

178. The determination of L-ascorbic acid in food products. J. Blatt, J. Franger, V. Sanda, P. Zuman and H. Zupova. *Anal. Chem.* 1954, 26, 102-108; *Referativy Kh. Nauk*, 1954, Abstr. No. 15,069. —A volumetric and a polarographic method are described. In the volumetric method 10 to 20 ml of a solution or extract are made up to 50 ml with a mixture of 90% ethanol and 10% of acidified HCl, preserved in a dark bottle, and 200 ml of water. The solution is then made up to 500 ml, filtered and set aside in the dark. It is then titrated with 0.001 N aq. dichlorophenylindophenol solution. The rose colour persists for 15 min. The minimum amount of ascorbic acid that can be determined is 25 to 50 µg and the limits of error are 1 to 2 percent. In the analysis of coloured substances the titration is carried out in the presence of a colourless substance and the colour change is not observed. When the material contains reducing substances, these are allowed for by carrying out a blank estimation after the ascorbic acid has been condensed with formaldehyde. In the polarographic method the ascorbic acid is dissolved in an acetate buffer at pH 4.7. H. Zupova, Weng. Naturg. 1954, 142, 35; and the reference method is used.

FRANGOPOL, Maria

Chromatography on thin layer. Studii cerc chim 14 no.3:281-300 Mr '65.

1. Laboratory of Marked Organic Substances, Institute of Nuclear Physics of the Rumanian Academy, P.O.Box 35. Submitted October 19, 1964.

FRANGOPOL, P.; BALABAN, A.

The 2, 5-diphenyloxazole (PPO) preparation (organic scintillator in solution);
a laboratory note. p. 427.

Academia Republicii Populare Romine. STUDII SI CERCETARI DE CHIMIE. Bucuresti,
Rumania. Vol. 6, no. 3, 1958.

Monthly List of East European Accessions (EEAI) Vol. 8, no. 7, July 1959.

Uncl.

R/003/61/012/012/001/001
D282/D305

AUTHORS: Chiotan, C., Dema, I., Frangopol, F. T., Gird, E.,
and Voicu, V.

TITLE: Preparation of I-131 of high specific activity

PERIODICAL: Revista de Chimie, v. 12, no. 12, 1961, 706-708

TEXT: This paper was presented at the Institutul de fizică
(Institute of Atomic Physics), on May 4 - 6, 1961. It describes
experiments on preparing I-131 from tellurium dioxide. In the first
part of the article, the authors briefly describe some preparation
methods of radioiodine, referring to a great number of western pub-
lications and to the following Soviet scientists: D. J. Riabchikov,
A. H. Ermakov, L. S. Kozyreva and V. S. Oreshko. In the second
part of the article, they describe their experiments as follows.
Powered tellurium dioxide was irradiated in the I.F.A. reactor for
3 - 4 weeks, 40 hrs every week, at a flux of $1 \cdot 10^{13}$ n/sq cm s.
The irradiated powder was then dissolved in a 10% NaOH solution by

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Card 1/3

R/003/61/012/012/001/001
D282/D305

Preparation of I-131 ...

using magnetic agitation. The solution was filtrated and acidulated with H_2SO_4 to a ratio of 1 : 1. This mixture was then introduced into a balloon flask, and a 1.5% solution of $Fe_2(SO_4)_3$ was added to guarantee the oxidation of the iodine. This solution was distilled in vacuum, while the product obtained was collected in a second balloon flask, already containing a titrated solution of NaOH. The distillation process lasted 2 - 4 hrs. The concentration of the I-131 solution was achieved by evaporation in the second balloon flask. Thus, specific activity of the I-131 solution was considerably increased. The I-131 solution obtained was removed and neutralized with n HCl, up to a pH = 7. The separation efficiency of I-131 from TeO_2 irradiated under these conditions was approx 75%. Thus, 300 - 400 mC of radioiodine were obtained from a charge of 40 g TeO_2 . γ spectrometrical and chromatographical analyses of I-131 did not present Te, IO_3^- or other impurities. Chemical analyses for the identification of traces of heavy metals, arsenic

Card 2/3

Preparation of I-131 ...

R/003/61/012/012/001/001
D282/D305

Fe^{2+} , SO_4^{2-} , etc., did not indicate their presence above the limits admitted for medical purposes. Acknowledgement is made to E. A. Ivanov, M. J. Cristu and D. Papae for their cooperation. There are 1 figure and 22 references: 2 Soviet-bloc and 20 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: L. Burkinshaw, Phys. in Med. Biol., 1958, 2, p. 255; of NSA. 1958, 12, 10.183; D. S. Ballantine, Natl. Nucl. Eng. Series, Div. IV, 9, Radiochem. Studies, The Fission Products, 1951, 3, p. 1639, McGraw Hill, London, 1951; Ballantine D. S., MDDC - 1600, C. C. Evars and J. Stevenson, Brit. Pat. 763.865; cf. CA, 1957, 51, 78970; and M. Inarida, J. Chem. Soc. Japan, Pure Chem. Sect., 1960, 80, p. 400.

ASSOCIATION: Institutul de Fizică Atomică al Academiei R.P.R.
(Institute of Atomic Physics Rumanian Academy of Sciences) and Laboratorul de Preparare a Radio-izotopilor (Laboratory for the Preparation of Radio-isotopes)

Card 3/3

FRANGOPOL, P.T.

Organic substances as moderators and cooling agents for nuclear reactors. Studii cerc fiz 14 no.4:437-451 '63.

BALABAN, A. T.; GAVAT, Maria; FRANGOPOL, P. T.; MOCANU, Maria; NENITZESCU, C. D.
[Nenitescu, C. D.]

Pyrylium salts obtained by diacylation of olefins. Pt. 13.
Rev chimie Roum 9 no.1:79-92 Ja '64

1. Institute for Atomic Physics (P.O.Box 35) and Institute of
Organic Chemistry of the Romanian Academy, Bucharest.

BALABAN, A. T.; GAVAT, Maria; FRANGOPOL, P. T.; MOCANU, Maria
MENITESCU, C. D.

Pyrrilium salts obtained by olefin diacylation. Pt. 12.
Studii cerc chim 12 no. 1: 71-85 Ja '64.

1. Institute of Atomic Physics and the Center of Organic
Chemistry of the Rumanian Academy, Bucharest.

FRANGOS, Ya.G., inzh.

Winding mechanisms on spinning and twisting machines. Tekst.
prom. 19 no.12:29-35 D '59. (MIRA 13:3)
(Spinning machinery)

FRANGOS, Ya.G.

The K-132 and K-176-2 twisting frames for producing cord yarn.
Biul.tekh.-ekon.inform. no.1:46-48 '61. (MIRA 14:2)
(Textile machinery)

FRANGULOVA, M. S.

FRANGULOVA, M. S., Chair of Pharmacology of the First Medical Institute, Leningrad

"Experimental Pharmacological Studies on Soviet Preparations of Scopolamine,"
Farm. i Toks., v. 2, no. 4, 1939, p. 47.

~~PLACENTA PREVIA~~
FIMANGULOVA, M.S., kandidat meditsinskikh nauk.

A rare case of placenta previa totalis. Akush. i gin. no.6:64-65
N-D '55 (MLRA 9:6)

1. Iz kafedry akusherstva i ginekologii I Leningradskogo
meditsinskogo instituta imeni akad. I.P. Pavlova (sav. kafedroy
-prof. I.I. Yakovlev)
(PLACENTA PREVIA
complete, management)

FRANGULOVA, M.S., kandidat meditsinskikh nauk

Surgical intervention in delivery; historical review of materials from the Leningrad Society of Obstetricians and Gynecologists from 1917 till 1950. Akush. i gin. 33 no.2:80-83 Mr-Apr '57. (MLRA 10:6)

1. Iz kafedry akusherstva i ginekologii (sav. - prof. I.I.Yakovlev)
I Leningradskogo meditsinskogo instituta imeni akad. I.P.Pavlova.
(CESAREAN SECTION, hist.
progr. in Russia since 1917)

KORYAKINA, T.O., doktor med. nauk (Kalinin, 2-ya ul. Shevchenko, 40, kv.23);
FRANGULOVA, M.S., kand. med. nauk

Frequency and labor in a patient with direct portasaval anastomosis.
Vest. khir. 92 n. 1:86-87 Ja '64. (MIRA 17:11)

1. Iz gospi'tal'noy khirurgicheskoy kliniki Kalininskogo meditsinskogo
instituta i kafedry akusherstva i ginekologii. 1-go Leningradskogo me-
ditsinskogo instituta imeni Pavlova.

FRANG-ULYAN, A.M.

21

PROCESS AND PREPARATION

22

Rational utilization of the flash towers in the two-turnover process. A. M. Frangulyan. *Nefteprom Prom.* N. 1960, No. 7, p. 11. The author recommends the use of flash towers only for the evaporation of the gas oil from the cracked residue. The raw material is preheated in heat exchangers to 180-200° by the condensate from the evaporator. This practice permits obtaining a gas oil from the evaporator of a definite quality which is easily regulated by the feed of the reflux. Thus, the condensate in both towers is greatly improved and the capacity of the unit increased. The capacity can be still further improved by preheating the raw material to 250-270° for this purpose. The insertion of a fourth arch is recommended. This method yields a better condensate than the customary method, where a mixt. of aromatic, olefin and satd. hydrocarbons is obtained that can be cracked only unsuccessfully.

A. A. Bochtinsk

ASM-ELA METALLURGICAL LITERATURE CLASSIFICATION

22

SEARCHED												SERIALIZED												INDEXED											
DATE												DATE												DATE											

FRANGULYAN, A.M.

Continuous coking of petroleum residues as a means of increasing
the yield of light petroleum products. Khim i tekhn. topl. i masel
3 no.3:43-45 Mr '58. (MIRA 11:3)

1.Orenburgskiy sovnarkhoz.
(Petroleum products)

FRANGULYAN, A.M.

Selecting the flow sheet for coking petroleum residues (discussion).
Khim. i tekhn. topl. i masel 9 no. 2: 14-18 F '64. (MIRA 17:4)

1. SK "Orgneftezavody".

FRANGULYAN, A.M.

Speeding up processes and improving equipment in the primary
refining of petroleum. Khim. i tekhn. topl. i masel 9 no.11:
53-61 N '64 (MIRA 18:1)

1. SK "Orgneftzavody".

7000 A

Substituted glycidic derivatives. L. V. Skolnik, A. Ya.
Berlin, and G. A. Franzblau. U.S.S.R. 102,584, Apr. 30,
1966. Glycidic acid esters are reduced with LiAlH_4 under
strong cooling. The resulting glycidic alcohols are then hydro-
lyzed in an acid medium. M. Hesch

12

5
4541
4530d

L 6390-66 EWT(m)/EPF(c)/EWP(j) RM

ACC NR: AP5026740

SOURCE CODE: UR/0286/65/000/017/0016/0016

INVENTOR: ^{44,5}Lel'chuk, S. L.; ^{44,5}Ivanova, N. A.; ^{44,5}Vabel', Ya. I. (Deceased); ^{44,5}Agafonova, M. I.; ^{44,5}Frangulyan, G. D.; ^{44,5}Semyannikova, A. M.

ORG: none

TITLE: A method for producing dimethyldichlorosilane. ^{44,5}Class 12, No. 174185 ⁴⁶

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 16

TOPIC TAGS: silane, dimethyldichlorosilane, silicone

ABSTRACT: This Author's Certificate introduces a method for producing dimethyldichlorosilane by interacting methyl chloride with a silicon-copper alloy treated with a cadmium compound. The product yield is increased by using cadmium chloride in the amount of 4.3% of the weight of the alloy and subjecting the processed alloy to thermal treatment at 180°C.

UDC: 547.419.5.07

SUB CODE: GC,OC/

SUBM DATE: 27Oct62/

ORIG REF: 000/

OTH REF: 000

Card 1/1

0902 0141

Country	: USSR	F
Category	Microbiology. Antibiosis and Symbiosis. Antibiotics.	
Abstr. Jour	Ref Zhur-Biol., No 23, 1958, No 103702	
Author	Pikovskaya R. I.; Frangulyan I. S.; Rtskhiladze S. I.	
Institut.	<i>Lyubimovskiy sanitarnyy institut Ministerstva</i>	
Title	Antibacterial Properties of Humus. <i>zhurnal khimicheskoy fiziki</i> USSR.	
Orig. Pub.	Zh. mikrobiol., epidemiol. i immunobiologii, 1956, No 2, 28-31	
Abstract	<p>Fifty one series of crude fluids were obtained from aqueous extracts of terra rossa which exerted an antibacterial effect <u>in vitro</u> on bacteria of the colon-typhoid group. The fluids are thermostable and withstand sterilization at 120° and a pH of 3.9-4.5. The antibacterial substances found in the extracts come from humus. Fractionation of the fulvic acid fraction of humus made it possible to isolate the active part, which is distinguished from the original crude substance by a number of properties, particularly, by the capacity of maintaining its activity in protein media. The acid and principally organic nature of the antibacterial substances</p>	
Card:	1/2	

7-24

FRANGULYAN, L.A.

USSR / Microbiology. Sanitary Microbiology.

F-2

Abs Jour : Ref Zhur - Biol., No 2, 1958, No 5197

Author : Frangulyan, L.A.

Inst : Not given

Title : Survival of Flexner Dysentery Bacilli in Water. (Experimental Data)

Orig Pub : Tr. Erevansk. med. in-ta, 1956, No 8, 311-316

Abstract : The author infected tap and river waters (100 ml) with a culture of Flexner bacilli at the rate of 10,000 cells per ml. of water. The tests were conducted on 15 strains (5 stock, 5 sensitive to and 5 resistant to norsulfazole and syntomycin isolated from patients). It was shown that medicinally resistant strains survive longer, especially in tap water (at 2-6° for 32-42 days); stock strains die off sooner, especially in river water (in 3-9 days). The author considers that in cases of natural infection, water may play a definite role in spreading bacterial dysentery.

Card : 1/1

Country	: USSR	F
Category	: Microbiology-Microbes Pathogenic for Man and Animal	
Abs. Jour	: Ref Zhur - Biol., No.19. 1958, 86139	
Author	: <u>Frangulyan, L.A.</u>	
Institut.	: -	
Title	: Quantitative Count of Times of Retention of Viability of Dysentery Bacilli in Water	
Orig. Pub.	: Izv. A.N. ArmSSR. Biol. i S.-Kh. N., 1957, Vol.10, No.3, 97-100	
Abstract	: Each of 25 strains of Flexner bacilli were used to infect 100 ml of tap water in the city of Yerevan. The water was placed in sterile flasks and bacilli added until the count was 10 thousand microbes per ml. The flasks were kept at room temperature (17.7 to 19.5 degrees). Each day, 0.1 ml of the water was transferred to Plonkirev's medium (3 dishes). After 24-hour incubation at 37 degrees, counts were made of the number of colonies. The greatest viability was exhibited by treatment-resistant strains of Flexner bacilli, and the least by the museum strains. Treatment-sensitive strains occupied an	
Card:	1/2	

FRANGULYAN, L. A.
FRANGULYAN, L. A.

Comparing the drug resistance and biological properties of
Flexner's bacilli isolated from dysentery patients. Izv. AN Arm.SSR.
Biol.i sel'khoz.nauki 10 no.8:93-96 Ag '57. (MIRA 10:10)

1. Kafedra mikrobiologii Yerevanskogo meditsinskogo instituta.
(SHIGELLA PARADYSENERIAE)

FRANGULYAN, L.A.
MIKAYELYAN, V.G.; MELKUMYAN, M.O.; FRANGULYAN, L.A.

Resistance of Shigella to norsulfazone and synthomycin. Zhur.
mikrobiol.epid. i immun. 28 no.8:56-60 Ag '57. (MIRA 11:2)

1. Iz kafedry mikrobiologii Yerevanskogo meditsinskogo instituta.
(SHIGELLA DYSENTERIAE, effect of drugs on,
chloramphenicol & sulfathiazole, resist. (Rus))
(CHLORAMPHENICOL, effects,
on Shigella dysenteriae, resist. (Rus))
(SULFATHIAZOLE, effects,
same)

COUNTRY : USSR
 CATEGORY : Microbiology

ABS. JOUR. : Ref Zhur-Biologiya, No.4, 1959. No. 14311

AUTHOR : Mikaelyan, V.G.; Melkumyan, H.O.; Frangulyan, I.
 INST. :

TITLE : Resistance of Dysentery Bacteria to Norsulfazol and Syntomycin.

ENG. PUB. : Zh. mikrobiol., epidemiol. i immunobiologii, 1957, No.8, 56-60

ABSTRACT : Of 215 strains of Flexner dysentery bacteria isolated from patients, 51 strains were sensitive to norsulfazol (from 0.01 - 0.5 mg/ml) and 90 strains to syntomycin (from 0.1 to 3 Y/ml). Half of the studied strains (52.2%) did not have concurrent resistance to norsulfazol and syntomycin. Syntomycin revealed a more sharply expressed bacteriostatic action than norsulfazol. The bacteriostatic action of norsulfazol and syntomycin was manifested

CARD: 1/2

COUNTRY
CATEGORY

ABS. JOUR.

AUTHOR
INST.
TITLE

No. 14811

ORIG. PUB.

ABSTRACT : in a broad range of concentrations from 0.5 to 12 mg/ml for norsulfazol and from 0.25 to 20 Y/ml for syntomycin. Of 33 strains of Flexner dysentery bacteria isolated from children up to 1 year of age, who had never received syntomycin and norsulfazol previously, 32 strains were resistant to norsulfazol and 23 to syntomycin. -- S.P. Chapovalova

CARD:

2/2

FRANGULYAN, L. A.: Master Med Sci (diss) -- "The viability of pharmaceutically stable local strains of dysentery bacteria of the Flexner type in water (observations under laboratory and natural conditions)". Yerevan, 1958. 22 pp (Yerevan State Med Inst, Chair of Microbiology), 150 copies (KL, No 2, 1959, 126)

L 00864-66

ACCESSION NR: AP5015865

UR/0119/65,000/006/0005/0007

681.122:621.3.088

AUTHOR: Balabin, I. Ye. (Engineer); Frangulyan, L. A. (Engineer)

31

TITLE: Measuring gas rate-of-flow with automatic pressure-variation correction

B

SOURCE: Priborostroyeniye, no. 6, 1965, 5-7

TOPIC TAGS: rate of flow measurement, gas measurement

ABSTRACT: It is assumed that the gas rate-of-flow is measured by linear-characteristic rotameters with or without quadratic-characteristic differential manometers. In practice, the correction of the rate-of-flow measurement can be realized by Soviet standard measuring modules ("AUS"), such as PD-36A, RS-33A, BS-34A, etc. Two cases are examined: (1) When the gas rate-of-flow is measured by a linear-characteristic instrument and (2) When the gas rate-of-flow is measured by a quadratic-characteristic primary detector. Orig. art. has: 3 figures and 9 formulas.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ME, IE

NO REF SOV: 005

OTHER: 000

Card 1/1

FRANGULYAN, L.V.

How we prevent sterility in cows. Veterinaria 40 no.8:7-8
Ag '63. (MIRA 17:10)

1. Glavnyy veterinarnyy vrach Yemel'chinskogo rayona Zhito-
mirskey oblasti.

FRANGUL'YAN, T.S.

F and M absorption bands in solid solutions of the system

KCl-KBr. Opt. i spektr. 19 no.2:299-300 Ag '65.

(MIRA 18:8)

FRANGULYAN, V.

Rights and duties of the departments of technical control. Prom.Arm.
7 no.1:83-84 Ja '64. (MIRA 17:4)

1. Zamestitel' nachal'nika yuridicheskogo otdela Soveta narodnogo
khozyaystva Armyanskoy SSR.

8 (6)

AUTHORS:

Volosatov, O. P., Engineer, 30V/105-59-6-27/28
Grichevskiy, E. Ya., Engineer, Frangulyan, V. I., Engineer,
Zul', N. M., Candidate of Technical Sciences, Yakobs, A. I.,
Candidate of Technical Sciences

TITLE:

S. A. Burguchev. Power Stations and Substations for Agriculture.
A Manual for the Departments of Electrification in Agriculture.
671 Pages, Price 16 Rubles 5 Kopecks, Publishing House Sel'khozgiz,
1958 (S. A. Burguchev. Elektricheskiye stantsii i podstantsii
sel'skokhozyaystvennogo naznacheniya. Uchebnoye posobiye dlya
fakul'tetov elektrifikatsii sel'skogo khozyaystva. 671 str.,
ts. 16 rub. 5 kop. Sel'khozgiz, 1958)

PERIODICAL:

Elektrichestvo, 1959, Nr 6, pp 95 - 96 (USSR)

ABSTRACT:

This is a book review. The author has written this valuable
book backed by his long engineering and teaching experience.
It can be used by students and by engineers working in the
electrification of agriculture. It may come in useful also for
extension courses. It is very well arranged, and all basic
chapters of the course have been given ample space. The subject
is discussed from the viewpoint of modern engineering solutions.

Card 1/2

S. A. Burguchev. Power Stations and Substations SOV/105-59-6-27/28
for Agriculture. A Manual for the Departments of Electrification in Agriculture
671 Pages, Price 16 Rubles 5 Kopecks, Publishing House Sel'khozgiz, 1958

A great deal of attention is also paid to the physical interpretation of problems. A sufficient number of sample problems are added. The book has 12 sections with 44 chapters. A short summary of each chapter is given, and rare shortcomings are indicated.

ASSOCIATION: Giprosel'elektro (All-Union Institute for the Design and Planning of Rural Electrification), VIESKh (All-Union Scientific Research Institute of Rural Electrification)

Card 2/2

CHAN DAN KHOA [Ch'ang Fang Houe], inzh.; FRANGULYAN, V.I.; VALYAVSKIY, Yu.P.

Power engineering in the Democratic Republic of Vietnam. Elek. sta.
32 no.12:56-59 D '61. (MIRA 15:1)

1. Zamestitel' predsedatelya National'nogo Sobraniya Demokraticheskoy
Respubliki V'yetnam (for Chan Dan-khoa).
(Vietnam, North--Electric power)

L 04404-67 EWT(1)/EWT(m)/EWP(j)/T/EWP(k) IJP(o) WG/RTW/AT/RM
ACC NR: AP6034418 SOURCE CODE: UR/0386/66/004/008/0277/0282

AUTHOR: Arutyunyan, F. R.; Ispiryan, K. A.; Oganesyan, A. G.; Frangyan, A. A. ⁵⁴₅₁ B

ORG: Joint Radiation Laboratory, AN ArmSSR and YeGU(Ob'yedinennaya radiatsionnaya laboratoriya AN ArmSSR i YeGU); Physics institute, Yerevan (Fizicheskiy institut)

TITLE: Resonance radiation of electrons of energy up to 600 Mev in a layered medium

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 8, 1966, 277-282

TOPIC TAGS: resonance scattering, bremsstrahlung, electron radiation, radiation spectrum, layered medium

ABSTRACT: The authors present experimental results on the characteristics of the radiation produced in different layered media by passage of high-energy electrons. The experiment was performed with the electron synchrotron of FIAN SSSR (maximum energy 680 Mev). Different layered media were used. Each consisted of n sheets of a paper of definite thickness l_1 , placed in air at an equal distance α_1 from one another. The electrons were registered with a scintillation telescope consisting of two plastic scintillators located on the two sides of the layered medium. The radiation spectrum up to 100 keV was observed with a pulse-height analyzer. The measurements were made also for a solid medium, comprising the same layers compressed to $\alpha = 0$. The quantity measured in this case was that part of the radiation in the layered medium, which was due to the electron bremsstrahlung in the layered medium itself and in the remaining

Cord 1/3

L 04404-67

ACC NR: AP6034418

2

matter on the path of the electron, and also due to secondary effects. The experimental data show that for relatively low γ -quantum energies the radiation intensity in a layered medium depends to a considerable degree on the energy of the electron and exceeds by many times the radiation intensity in the solid medium. With increasing γ -quantum energy the spectrum of the radiation in the layered medium gradually goes over into the spectrum of the solid medium, which does not depend on α , I_1 , or E when the amount of matter remains constant. The difference in the radiation intensities in the layered and in the solid medium was compared with the results of the theory of resonance radiation with allowance for the γ -quantum absorption on their entire path. The experimental data exceeded by many times the corresponding theoretical ones even without allowance for the γ -quantum absorption. The experimental values exceeded the theoretical ones also for all the investigated layered media with different α , I_1 , and n . The observed difference is attributed to the appreciable scattering of electrons in the layered medium itself. It is assumed that multiple scattering leads to the appearance of photons of relatively high energy, normally not appearing when scattering is not taken into account. It is concluded that the experimentally observed radiation of electrons in a layered medium, with an intensity that exceeds by many times in the x-ray region the intensity of the bremsstrahlung, and which depends strongly on the particle energy (like E^n , where $n \geq 2$), can be used to determine the particle energy. The authors thank Professor V. A. Petukhov and the staff of the High-energy Electron Laboratory of FIAN SSSR for the opportunity to perform the present experiment, and

Card 2/3

L 04404-67

ACC NR: AP6034418

also Professor M. L. Ter-Mikayelyan for a discussion. Orig. art. has: 3 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 14 Jul 66/ ORIG REF: 007

Card 3/3 ymb

FRANIA, Jan

Use of shielded conductors for cutting machines. Wiadom gorn
10 no. 7/8:249-251 J1-Ag '59.

FRA"IC, Mladen

Modern and economical packaging of edible salt. Kem ind 9 no.9:
N-36--N-43 S '60.

1. Biro za fudarstvo, Zagreb.

FRANIĆEVIC, J.

Ectopic pregnancy with review of regional pathology. Med. glas.
11 no.6:206-210 June 57.

1. Ginekološko-porodajni odjel Opće bolnice u Zadru (Sef: prim. dr.
R. Akerman)
(PREGNANCY, ECTOPIC
(Ser))

FRANJIC, J.

Peroperative control of surgical sponges. Acta chir.iugosl. 7(8)
no.3:271-273 '60.

1. Kirurska klinika Medicinskog fakulteta u Zagrebu (Predstojnik
prof. dr. Dimitrije Juzbasic)
(SURGERY OPERATIVE)

L 32411-05

ACC NR: AP60237P1

SOURCE CODE: YU/0015/65/000/00-/0150/0131

AUTHOR: Franicevic, Josip (Doctor); Arneri, Ivo (Doctor)

ORG: Gynecology-Obstetrics Service, Medical Center, Zadar (Ginekolosko-opstetricka sluzba Medicinskog centra)

TITLE: Practical experience in the treatment of edema in late pregnancy

SOURCE: Medicinski glasnik, no. 6-7, 1965, 160-161

TOPIC TAGS: chemotherapy, human ailment

ABSTRACT: Report on the treatment of 128 pregnant patients with edema, all of whom were treated with benzhydroflumethiazide-KCL combination (Benzyl-Rodiuran of German manufacture); treatment for 7 to 70 days gave very good results with no side effects except in a single patient, a nurse who complained of vertigo following this and "other" diuretics. Comprehensive clinical data indicates safety and effectiveness.

JPRS

SUB CODE: 06 / SUBM DATE: none / OTH REF: 004

Card 1/1

BROY, Adolf; FRANIK, Antoni

Primary cyst of the omentum. Polski przegl. chir. 32 no.12:1217-1221
'60.

1. Z II Oddziału Chirurgicznego Szpitala Miejskiego Nr 4 w
Katowicach Ordynator: dr A. Broy.

(OMENTUM dis) (CYSTS surg)

FRANK, FRANCISZEK

High-temperature oxide films on nickel, iron, and cobalt. *Frankel, Eugene. (1957) 577-593. J. Appl. Phys. 28, 43-60. (1957) French summary.*—The findings of Frankel and Pfeiffer (C.A. 40, 914M) are confirmed that oxidation of Ni occurs by countercurrent double diffusion. There are 2 layers: an internal one on metal-Ni and an external one. The former is formed because of O diffusion through Ni, whereas the latter is formed because of Ni diffusion through the oxide. The testing method described by Frankel (1954, 13379c) was used. Then a 1.2 mm x 1.2 mm x 0.1 mm specimen was wound repeatedly to fit length in the furnace with a 34 wire of 0.1 mm, diam. The plate was mounted and sealed with Si to that the 34 wire was embedded in it. The 34 wire is called "the witness". The oxidation was carried out at 650° for 48 hrs. and then after the witness was surrounded by another oxide, at least the witness here, before the oxidation was carried out. The oxide layer of 1000 Å was diffused to 1000 Å. The oxide layer was 1000 Å thick (21 hrs.) in the internal layer. The external layer was 1000 Å thick.

KOZIC, M.; FRANJIC, J.

Our experience with liquorrhea. Acta chir. Iugosl. 12 no.1:
12-22 '65.

1. Kirurska klinika Medicinskog fakulteta u Zagrebu (Predstojnik
prof. dr. D. Juzbasic).

FRANJKOVIC, Krunoslav, inz. (Translator)

Preparation of pipes for welding can be simplified by the application of corresponding tools. Zavarivanje 3 no.9/10: 170-172 N-D '60.

FRANK, Albert

Histological picture of thyroid gland in the poultry treated with methylthiouracil during experimental fattening. Biol glas 14 no.1/2:13-16 '61.

1. Odjel za anatomiju, histologiju i embriologiju Instituta za morfologiju i fiziologiju Veterinarskog fakulteta u Zagrebu.

GREBENSHCHIKOV, S.Ye.; RAYZER, M.D.; RUKHADZE, A.A.; FRANK, A.G.

Reflection and refraction of shock waves in magnetohydro-
dynamics. Zhur.tekh.fiz. 31 no.5:529-538 My '61. (MIRA 14:7)

1. Fizicheskiy institut imeni P.N.Lebedeva AN SSSR, Moskva.
(Shock waves) (Plasma (Ionized gases))
(Magnetohydrodynamics)

FRANJETIC, K.

FRANJETIC, K. Construction of the first supersulfate cement plant in Yugoslavia.

Vol. 4, No. 8, Aug. 1955

KEMIJA I INDUSTRIJA

SO:Monthly List of the East European Accessions, (EEAL), IC, Vol. 5, No.3
March, 1956

PHELPS, Herman C.; FRANJKOVIC, Krunoslav, inz. [translator]

New way of cutting soft steel by means of a plasma cutter.
Zavarivanje 4 no.1:8-10 Ja '61.

FRANJKOVIC, Krunoslav, inz. [translator]

Electric machine cutter, a tool of modern construction. Zavarivanje
4 no.1:11-12 Ja '61.

FRANJKOVIC, Krunoslav, ins. [translator]

Propane and acetylent. Zavarivanje 4 no.1:18 Ja '61.

FUCHS, E.; FRANJKOVIC, Krunoslav, inz. [translator] (Zagreb)

Quality of welding. Zavarivanje 4 no.2:37-42 F '61.

1. "Poljmontaza", Zagreb (for Frnajkovic).

FRANJO, M.F.
CA

17

Content of vitamin C in some medicinal plants. Mihelić
F. Franjo (Zaved. na biomedic. Farmaceut. fakulteta,
Zagreb, Yugoslavia). Farm. Glasnik 6, 1-6(1950).---
By means of Tillmans' titration method ascorbic acid was
detd. in *Digitalis lutea*, *Digitalis purpurea*, *Salvia officin-*
alis, *Verbascum*, *Ruta graveolens*, *Mentha piperita*, *Madra-*
ria, and *Isatis tinctoria*. Rts. of the plants were
prepd. with 2% HCl and titrated by the addn. of 2,6-
dichlorophenol-indophenol as indicator. There is no
regularity in the accumulation of vitamin C in different
plants. The variations depend largely on weather condi-
tions. The quantity of vitamin C is influenced by the
fact that the plants examd. belong to different botanical
families and that they were grown under different geo-
graphical and climatic conditions. During the blooming
period vitamin C increases in the leaves of *Digitalis*
lutea and *D. purpurea*, while a continuous increase was
detd. during the entire vegetation period in all leaves
except those of *Verbascum*. E. Froelich

S/137/62/000/012/064/085
A006/A101

AUTHOR: Franjo, Rešek

TITLE: Nitriding alloyed steel and iron to raise wear resistance and fatigue strength

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 130, abstract 12I803 ("Zašt. mater.", 1962, v. 10, no. 2, 49 - 51, Serbo-Croatian)

TEXT: The method of nitriding in a salt solution yields higher wear resistance than nitriding in NH_3 . Nitriding of steel, alloyed with Cr, Al, W, and V increases H_v up to 550 and of high-speed steel to 800 - 1,000°C. The nitriding temperature for non-alloyed and low-alloyed steels is about 580°C, and 540°C is the maximum temperature of nitriding high-speed steels. Nitriding duration in salts is 1 - 2 hours. After nitriding, wear resistance of Fe is risen by a factor of 5 and more. The wear resistance of friction parts in an automobile motor increases after nitriding by a factor of 2, as compared with non-nitrided parts. For instance, the wear of a nitrided automobile cylinder after running

Card 1/2

RODE, B.; FRANK, A.; VARICAK, T.

The distribution of acid and alkaline phosphatase activities
in some organs of *Cyprinus carpio* L. Bul sc Yug 9 no.6:158-
159 D '64.

1. Department of Anatomy, Histology, and Embryology of the
Veterinary Faculty, Zagreb. Submitted August 3, 1964.

10-8000
26.2321

8/057/61/031/005/004/020
B104/B205

AUTHORS:

Grebenshchikov, S. Ye., Rayzer, M. D., Rukhadze, A. A.,
and Frank, A. G.

TITLE:

Reflection and refraction of shock waves in magnetohydro-
dynamics

PERIODICAL:

Zhurnal tekhnicheskoy fiziki, v. 31, no. 5, 1961, 529-538

TEXT: The authors studied the reflection and refraction of converging ring-type shock waves by a cylindrical "magnetic wall". As the front width of the shock waves was much smaller than the radial dimensions of the magnetic wall, the experimental results could be interpreted theoretically in terms of the interaction of a plane shock wave with the magnetic wall. The experimental arrangement is schematically shown in Fig. 1. The shock wave was produced electrostatically in a 360-kc gas discharge. Two parallel-connected 0.2- μ f capacitors were used as a power source. Two copper coils surrounding a vacuum chamber had an inductance of 0.57 μ h. A cylindrical magnetic wall was produced by means of a quasi-static magnetic field ($\dot{H} = 2.5$ kc/sec) which had been generated by the discharge

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Reflection and...

S/057/61/031/005/004/020
B104/B205

of two parallel-connected 150- μ f capacitors through two coils (also connected in parallel) with a total inductance of 13.2 μ h. The distributions of the magnetic fields are graphically represented in Fig. 2. In a detailed theoretical discussion, the authors derive the following set of equations for the velocities of reflected and refracted shock waves:

$$\left. \begin{aligned} \alpha + \beta(\alpha - x)(\alpha - z) &= h + yz, \\ \frac{y^2 + \eta}{\alpha - x} + \frac{\beta}{2}[(\gamma - 1)\alpha - (\gamma + 1)z + 2x] &= 0, \\ \eta + h \frac{2y - \gamma z}{y - z} &= \frac{y}{2}[2y - (\gamma + 1)z]. \end{aligned} \right\} \quad (16)$$

in the dimensionless parameters

$$\left. \begin{aligned} x &= \frac{u_1}{u_0}, \quad y = \frac{u_2}{u_0}, \quad z = \frac{v}{u_0}, \\ \eta &= \frac{1}{M_0^2}, \quad h = \frac{H_{20}^2}{8\pi\rho_0 u_0^2}, \quad \beta = \frac{\rho_1}{\rho_0} = \frac{\gamma + 1}{\gamma - 1 + 2\eta}, \quad \alpha = \frac{v_1}{u_0} = \frac{2(1 - \eta)}{\gamma + 1}. \end{aligned} \right\} \quad (15)$$

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Reflection and...

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Here, the usual symbols ρ , p , and v with the index 0 refer to a gaseous state that exists without the magnetic field of the shock wave. The index 1 refers to quantities behind the shock wave (Fig. 6). u_1 and u_2 are the velocities of the refracted and reflected shock waves, respectively; v is the velocity of the gas between these waves. Next, approximate solutions are derived for two limiting cases, i.e., for very weak and very strong magnetic fields. The solutions

$$\left. \begin{aligned} u_1 &= u_1 - c_1, \\ u_2 &\approx u_0, \\ v &\approx v_1. \end{aligned} \right\} \quad (17)$$

and

$$\left. \begin{aligned} u_1 &= -u_0 \frac{2(\gamma-1)}{(\gamma+1)}, \\ u_2^2 &= c_0^2 + \frac{H_1^2}{4\pi\gamma_0}, \\ v &\approx 0 \end{aligned} \right\} \quad (18)$$

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02773

Reflection and...

S/057/61/031/005/004/020
B104/B205

are obtained. Summing up: On the strength of experimental results, it was possible to neglect the ionization energy as compared to the kinetic energy of the gas, since the former amounts to less than one-tenth of the kinetic energy at velocities $u > 2 \cdot 10^6$ cm/sec. It is shown that the reflection of a shock wave from the magnetic wall is determined essentially by the parameter $h = H^2 / 8\pi \rho_0 u_0^2$, which expresses the ratio of the density of magnetic energy to the density of kinetic energy in the shock wave. The experimental conditions showed that the velocity u_0 of the incoming wave and the gas pressure p_0 are interrelated by $u_0 \sim 1/\sqrt{p_0}$. This velocity decreases as the molecular weight of the gas increases. In the present case, the quantity $\rho_0 u_0^2$ again depends neither on the type of gas nor on pressure. Thus, h is determined only by the strength of the magnetic field at the point of reflection, even in discharges in different gases and at different pressures. Consequently, the reflection of shock waves must be equal with equal fields. The calculated values are determined chiefly by $\gamma = c_p/c_v$. Thus, different maximum velocities u_1 of reflected

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waves are obtained for different values of γ and also different values of h at which maximum velocities are attained. For $\gamma = 5/3$, e.g., one obtains $u_{1\max} = -u_0/2$, $h_{\max} \approx 4.5$; for $\gamma = 7/5$, $u_{1\max} = -u_0/3$ and $h_{\max} \approx 6.7$. For $\gamma = 5/3$ the experimental results agree well with the theoretical ones.

With a field of about $4 \cdot 10^3$ oe, the velocity of the reflected wave is half as high as that of the incoming wave. This corresponds to $h \approx 4$, which means that the gas behind the shock wave dissociates almost entirely. Good agreement with the experimental results is obtained even with weak

magnetic fields (less than $2 \cdot 10^3$ oe, i.e., $h < 1$). An increase in the velocity of the shock waves passing through the magnetic field is obtained with all magnetic field strengths, which is in accordance with theory. Thus, the velocity of a refracted wave in a field of about $4 \cdot 10^3$ oe is three times as high as that of the incoming wave and becomes equal to the magnetosonic velocity. R. A. Latypov is thanked for help in experiments, and A. T. Matachun for calculations done with the "Ural" computer. There are 8 figures and 5 Soviet-bloc references.

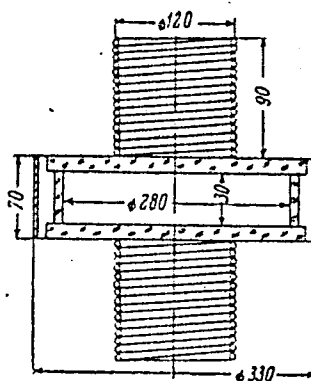
Card 5/8

Reflection and...

S/057/61/031/005/004/020
B104/3205

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
Moskva (Institute of Physics imeni P. N. Lebedev, Academy
of Sciences USSR, Moscow)

SUBMITTED: July 25, 1960



Card 6/8

L 14526-63

EWI(1)/EWG(k)/BDS/EEC(b)-2/ES(w)-2 AFTTC/ASD/ESD-3/

AFWL/SSD P1-4/Po-4/Pab-4/Pz-4 AT/IJP(C)

ACCESSION NR: AP3005515

S/0057/63/033/008/1011/1020

AUTHOR: Rayzer, M. D.; Frank, A. G.; Kitayeva, V. F.

87

TITLE: Localization of high-frequency induction discharge 21

82

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 33, no. 8, 1963, 1011-1020

TOPIC TAGS: induction discharge, high-frequency discharge, high-frequency induction discharge, plasma, plasma discharge, hydrodynamic instability

ABSTRACT: A detailed investigation has been made of conditions for the localization of high-frequency induction discharge in H₂, He, Ar, and air at pressures of 1.0 to 30 mm Hg, discharge frequencies of 5 to 16 Mc, and discharge currents of 30 to 120 amp. It was found that during an hf induction discharge in a bell-shaped magnetic field at a gas pressure above 1.0 mm Hg, a plasma coil is generated which is separated from the walls of the vacuum chamber and which lasts during the whole hf pulse. The conductivity, temperature, and ionization rate of the plasma were measured, and the shape of the plasma coil was investigated by means of high-speed photography. A qualitative explanation of discharge localization is given on the basis of a hydrodynamic model of weakly ionized

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L 14526-63

ACCESSION NR: AP3005515

5
plasma. "The authors thank P. A. Lityapov and L. I. Shumskiy for help in performing the experiments and M. S. Rabinovich and A. A. Rukhadze for valuable suggestions." Orig. art. has: 4 figures and 15 formulas.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR, Moscow (Physics Institute, AN SSSR)

SUBMITTED: 12Jun62

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH

NO REF SOV: 005

OTHER: 004

Card 2/2

FRANK, A.G.; KUZNIK, V.I.

Experience with resuscitation and reanimation of patients from
terminal states under district hospital conditions. Khirurgiya
32 no.9:23-25 S'63 (MIRA 12:3)

1. Iz 2-y gorodskoy bol'nitsy (glavnyy vrach K.I. Bashko)
Krasnotur'inskaya Sverdlovskoy oblasti.

RAYZER, M.D.; STRELKOV, P.S.; FRANK, A.G.

Localization of a linear high-frequency current in a gas
by a quadrupole magnetic field. Zhur. tekhn. fiz. 34 no.6:
1040-1049 Je '64. (MIRA 17:9)

1. Fizicheskiy institut imeni Lebedeva AN SSSR, Moskva.

ACCESSION NR: AP4040308

8/0057/84/034/006/1040/1049

AUTHOR: Rayner, M.D.; Strelkov, P.S.; Frank, A.G.

TITLE: Localization by a quadrupole magnetic field of a linear high frequency current in a gas

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.6, 1964, 1040-1049

TOPIC TAGS: plasma, gas discharge, discharge plasma, electric discharge, discharge tube, plasma-magnetic field interaction

ABSTRACT: The authors investigate the effect of a quadrupole magnetic field on the configuration of a 3.2 megacycle/sec linear discharge in hydrogen and air at pressures from 0.006 to 5 mm Hg and currents from 0.3 to 3.0 kA. The discharge was excited by ten 17 turn toroidal coils surrounding the 7.3 cm diameter 72 cm long discharge tube and forming part of the anode circuit of a self-excited oscillator operated with 1 millisecc pulses. Plane metal electrodes, 4 or 6 cm in diameter, were located at each end of the discharge tube. These electrodes were connected externally through capacitors and a system of four metal rods parallel to and equidistant from the axis of the tube. Discharge through these rods of a 0.001 farad capacitor charg-

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ACCESSION NR: AP4040308

ed to 6 to 8 kV produced the quadrupole magnetic field, which attained values as great as 3800 Oe at the wall of the discharge tube. Adjacent rods were separated by 15.5 cm, and the oscillating frequency of this system was 1 kilocycle/sec. The azimuthal magnetic field was measured with a magnetic probe that could be positioned anywhere along a radius of the discharge tube. From these measurements the radial distribution of the current was obtained. The total discharge current was measured with a current transformer (Rogovskiy belt). The plasma was probed with 3.2 and 0.82 cm microwaves. Both the transmitted and the reflected waves were observed, and from the phase shift of the reflected waves, the distance from the wall of the tube was determined at which the critical charged particle densities were attained. The loading of the exciting oscillator by the plasma was measured, and from this the conductivity of the plasma was determined. High speed photographs of the discharge were made. Many of the data obtained are presented graphically, and they are discussed in considerable detail. A skin effect was observed at pressures below 0.1 mm Hg; the thickness of the skin layer decreased with increasing current and decreasing pressure. When the quadrupole magnetic field was sufficiently great, the current was confined to an axial region of diameter about two-thirds that of the tube. Such localization of the discharge current did not alter the distribution of charged particles in the plasma; in particular, the positions of the critical charged particle

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ACCESSION NR: AP4040300

densities for microwave reflection did not vary with the quadrupole magnetic field. At pressures above 1 mm Hg a localization of the current was observed even in the absence of the quadrupole magnetic field. This was evinced by a drop in the reflected microwave intensity, indicating loss of radial symmetry of the charged particle density, and by large irregular fluctuations of the magnetic probe readings. The fluctuations of the readings of two magnetic probes separated by 14 cm in the axial direction were uncorrelated under these conditions. Application of the quadrupole magnetic field tended to stabilize the high pressure discharge. "The authors are grateful to B.M.Gutner and N.V.Uspenskaya for assistance in adjusting the high frequency oscillator, to Yu.S.Antonov and R.A.Laty*rov for assistance with the experimental work, and to M.S.Ravinovich, N.A.Boby*rev, I.S.Danilkin, A.A.Rukhadze, and I.S.Shpigel' for discussing the results." Orig.art.has: 10 figures.

ASSOCIATION: Fizicheskiy institut im.P.N.Lebedeva AN SSSR, Moscow (Physics Institute, AN SSSR)

SUBMITTED: 14Jun63

DATE ACQ: 19Jun64

ENCL: 00

SUB CODE: ME, EM

NR REF SOV: 006

OTHER:000

Cord 3/3

FRANK, Albert

Time variability in the ossification of tuberositas tibiae in poultry (Gallus domesticus) in normal and in fattening growing. Biol glas 15 no. 4: 225-227 '62.

1. Odjel za anatomiju, histologiju i embriologiju Instituta za morfologiju i fiziologiju Veterinarskog fakulteta u Zagrebu.

FRANK, A.

FRANK, A.; FRANK, T.

Structure of the liver in aquatic mammals in relation to the general structure of a liver. p. 101 (GLASNIK, Series II/8, v. 4/6, 1950/52, Zagreb, Yugoslavia)

SO: Monthly list of East European Accessions, (EAL), LC, Vol. 4, no. 1 Jan. 1955, Uncl.

FRANK, A.

Shortcomings in the organization of the centralized delivery of
goods in Kharkov. Sov. torg. no.2:59-60 F '58. (MIRA 11:1)

1. Tovaroved Khar'kovskogo otdeleniya Gastronom.
(Kharkov--Delivery of goods)

FRANK, A.A.

MESHKALLO, V.M., inzhener; Frank, A.A., inzhener.

Haulage of logs by the simplified technique of working a low store.

Mekh.trud.rab. 10 no.12:30-32 D '56. (MLRA 10:5)

(Khakass Autonomous Province--Lumber--Transportation)

FRANK, A. I. (Moskva)

New method of gravimetric determination of the dust content of the
air of industrial sites. Gig. truda i prof. zab. no.1:55-59 '62.
(MIRA 15:2)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.

(DUST) (AIR FILTERS)

L 0075-66 ENT(1)/ENT(F)/T/EMP(t)/EMP(b) IJP(c) JD/JG/GG

ACCESSION NR: AP5014197

UR/0386/65/001/002/0021/0027

AUTHOR: Lushchikov, V. I.; Taran, Yu. V.; Frank, A. I. 44-55

TITLE: Dynamic polarization of deuterons in a lanthanum-magnesium nitrate crystal 45

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 2, 1965, 21-27 47 48

TOPIC TAGS: deuteron polarization, single crystal, deuterium, heavy water, lanthanum, magnesium compound, nitrate 49 50

ABSTRACT: An attempt was made to polarize deuterium nuclei by the dynamic method. The specimen was a single crystal of binary lanthanum-magnesium nitrate $\text{La}_2\text{Mg}_3(\text{NO}_3)_{12} \cdot 24(\text{H}_2\text{O} + \text{D}_2\text{O})$ with a 1% Nd^{142} impurity. Part of the ordinary water of crystallization in this crystal has been replaced by heavy water. Mass spectroscopic analysis showed a deuterium content in the crystal of 42%. It was found that polarization in excess of 10% is possible in a magnetic field of 20,000 oersteds at a temperature of 1°K, which is much greater than the 1.2% polarization attainable in solid deuterium. Orig. art. has: 2 figures, 1 formula.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research) 44-55

SUBMITTED: 03Mar65
Card 1/1

ENCL: 00
NO REF SOV: 002

SUB CODE: NP
OTHER: 010

FRANK, A.S.

Peculiarities of chronic coronary insufficiency in some diseases.
Zdravookhranenie 3 no. 5:24-29 S-O '60. (MIRA 13:10)

1. Iz bol'nitsy Lechsanupravleniya (nachal'nik - kand.med.nauk
M.G. Zagarskikh) Ministerstva zdravookhraneniya Moldavskoy
SSR.

(CORONARY VESSELS—DISEASES)

FRANK, Abram Samoylovich; SHCHETININA, Ye., red.; TEL'PIS, V.,
tekhn. red.

[Coronary insufficiency syndrome in various pathological states]
Sindrom koronarnoi nedostatochnosti pri razlichnykh patologiches-
skikh sostoyaniyakh. Kishinev, Kartia noldoveniaske, 1961. 163 p.
(MIRA 15:6)

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ACCESSION NR: AP4040720

S/0043/64/000/002/0046/0056

AUTHOR: Frank, B.

TITLE: Theory of curves in a Minkowsky space

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 2, 1964, 46-56

TOPIC TAGS: Minkowsky space, curve theory, four dimensional space, pseudo-euclidean space, vector analysis, moving n-hedron, Frenet formula

ABSTRACT: A Minkowsky space is a four-dimensional pseudo-euclidean space R_4 of index 1. Regular curves in this space, depending on whether their tangent, normal and binormal vectors are less than, greater than or equal to zero, can be separated into seven classes. The traditional method of the moving n-hedron can be applied to curves of classes 1-4 without difficulty; it is not applicable to curves of classes 5-7 because of the peculiarity of isotropic vectors that they cannot be normalized and cannot form a part of an orthonormalized basis of space R_4 . In the present paper, this method is used for curves of all classes and, moreover, is successful in relating to curves of classes 2-7 a moving tetrahedron specialized in such a form that we obtain an analog of the Frenet formula

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having the form of the well-known Frenet formula for curves of class 1. Here, only the curves with euclidean and isotropic tangents have to be studied separately. The work is based on the fact that for curves with euclidean or isotropic tangents, an imaginary unit vector of the moving tetrahedron is arbitrarily fixed. During the course of the paper, nine theorems are proven. Orig. art. has: 1 table and 10 numbered formulas.

ASSOCIATION: none

SUBMITTED: 08Jan63

ENCL: 00

SUB CODE: MA

NO REF SOV: 002

OTHER: 004

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2448. Determination of lead as lead hydrogen phosphate. W. Hubicki, B. Frank, and J. Trau (*Ann. Univ. M. Curie-Skłodowska*, 1950, 5, [A], 53-64).—A new gravimetric method for the quant. determination of lead is described. A solution is prepared which contains 0.1–0.5 g. of Pb, 0.5 ml. of HNO_3 (1 : 1), 100–150 ml. of distilled water, and 4 ml. of H_2PO_4 (sp. gr. 1.25). The solution is heated to the b.p. and a conc. solution of NH_3 is added dropwise, to pH 4. Under these conditions a cryst. ppt. of PbHPO_4 is formed. The ppt. is filtered off, washed with distilled water, dried to constant weight at 200° , and weighed. The mean error in seven determinations of samples of pure lead is 0.13%. The use of ethanol for washing the ppt. gives slightly better results. S. K. Lachowicz.